IN THE CLAIMS:

Please cancel claims 1-21 without prejudice or disclaimer, and substitute new Claims 22-42 therefor as follows:

Claims 1-21 (Cancelled).

22. (New) A method for optimizing the positioning of high sensitivity receiver front-ends in a mobile telephony network of the CDMA type comprising a plurality of cells comprising the following steps:

defining a first and a second cell indicator;

defining a first and a second threshold;

comparing said first cell indicator with a first threshold value and said second cell indicator with a second threshold value;

associating with a first category a plurality of first cells, each of said first cells having said first cell indicator greater than said first threshold value or said second cell indicator greater than said second threshold value; and

positioning a plurality of high sensitivity receiver front-ends substantially in all said plurality of first cells.

23. (New) The method as claimed in claim 22, further comprising the steps of:

associating with a second category a plurality of second cells, each of said second cells having said first cell indicator smaller than said first threshold value and said second cell indicator smaller than said second threshold value; and

positioning a plurality of low sensitivity receiver front-ends substantially in all said plurality of second cells.

24. (New) The method as claimed in claim 22, wherein said step of defining for each cell a first and a second cell indicator, comprises the steps of:

associating with said first cell indicator cartographic/morphological characteristics indicative of a traffic expectation for each cell; and

associating with said second cell indicator cartographic/morphological characteristics indicative of a traffic expectation for each cell and of an expanse of geographic area whereon each cell stands.

25. (New) The method as claimed in claim 23 or 24, wherein said step of defining a first and a second threshold value comprises the step of selecting a pair of values for said first and second threshold value in such a way that said plurality of first cells is substantially equal in number to said plurality of high sensitivity receiver front-ends and said plurality of second cells is substantially equal to the difference between said plurality of cells and said plurality of first cells.

26. (New) The method as claimed in claim 25, wherein said pair of values comprises a first and a second value, said first and second value meeting the condition whereby the ratio between said first value and said second value is roughly equal to $1/15 \pm 0.005$.

27. (New) A mobile telephony network of the CDMA type comprising a plurality of cells, said plurality of cells comprising a plurality of first cells associated to at least 90% of a plurality of high sensitivity receiver front-ends, each first cell having a first cell indicator greater than a first threshold value or a second cell indicator greater than a second threshold value.

28. (New) The network as claimed in claim 27, comprising a plurality of second cells associated with a plurality of low sensitivity receiver front-ends, each second cell having said first cell indicator smaller than said first threshold value and said second cell indicator smaller than said second threshold value.

29. (New) The network as claimed in claim 27, wherein said first cell indicator is associated to cartographic/morphological characteristics indicative of a traffic expectation for each cell and said second cell indicator is associated to cartographic/morphological characteristics indicative of a traffic expectation for each cell and of an expanse of geographic area whereon each cell stands.

30. (New) The network as claimed in claim 27, wherein each high sensitivity receiver front-end is inserted between a transceiver antenna and a base transceiver station, said high sensitivity receiver front-end being a cryogenic receiver front-end.

31. (New) The network as claimed in claim 30, wherein said cryogenic receiver front-end comprises a cryostat that encloses a band-pass filter and a low noise amplifier mutually connected in cascade arrangement.

32. (New) The network as claimed in claim 31, wherein said band-pass filter is obtained with a technology based on high critical temperature superconducting materials.

33. (New) The network as claimed in claim 30, wherein said cryogenic receiver front-end is mounted at such a distance from said transceiver antenna that losses due to antenna lead-in are negligible with respect to the noise figure introduced by said cryogenic receiver front-end.

34. (New) The network as claimed in claim 30, wherein said cryogenic receiver front-end is mounted along an antenna lead-in in such a way as to minimize the overall noise figure of a receiver chain from said transceiver antenna to said base transceiver station.

35. (New) The network as claimed in claim 31, wherein said cryostat operates at cryogenic temperatures lower than 200° K.

36. (New) The network as claimed in claim 31, wherein said cryostat operates at cryogenic temperatures lower than 100° K.

37. (New) The network as claimed in claim 31, wherein said cryostat operates at cryogenic temperatures higher than 60° K.

38. (New) A method as claimed in claim 22, wherein each high sensitivity receiver front-end is inserted between a transceiver antenna and a base transceiver station said high sensitivity receiver front-end comprising at least a first and a second band-pass filter between which is inserted a low noise amplifier.

39. (New) The network as claimed in claim 27, wherein said plurality of cells is greater than a predetermined value.

40. (New) The network as claimed in claim 39, wherein said predetermined value is greater than 100.

41. (New) The network as claimed in claim 39, wherein said predetermined value is greater than 1000.

42. (New) The network as claimed in claim 39, wherein said predetermined value is greater than 500.